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ABSTRACT

This study examined the degree to which the structure of school organizations and the personal dispositions of teachers are related to the occurrence of militant conflict within or against school organization. This study was a part of a larger project studying the process of instituting change in school organization. A four-part questionnaire requesting information on militancy, initiative, structural openness and demography was used. This was given to participants at the conclusion of a brief interview dealing with organizational and curricular changes taking place in the school or school district. Usable questionnaires were returned by 86 percent of the sample, including 386 teachers, 71 department heads, 29 counselors, 24 administrators, and 12 others. The study demonstrated a relationship between perception of his ability to influence the school and the potential for militancy. Findings also emphasized contradictions concerning the effect of sexual roles and organizational size upon an individual's behavior. A 39-item bibliography is provided. (MJM)

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TEACHERS' MILITANCY, THE POTENTIAL FOR IT, AND PERCEPTIONS OF SCHOOL ORGANIZATIONAL STRUCTURE

by

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BASES FOR THE STUDY

Background

The decade of the 1960's saw the emergence of militancy as a major problem affecting school organizations. The problem afflicted first several key large city school systems, notably that of New York City, then spread widely to suburban and rural school districts, even showing up in attempts at statewide sanctions by teachers' organizations. It now appears that the peak of teacher militancy may have passed, but in 1968 and 1969 there was little let-up in sight.[1]

This study was conceived and executed during that period. It is an exploratory, descriptive study of the degree to which the structure of school organizations and the personal dispositions of teachers are interrelated with the occurrence of militant conflict within or against school organizations. By investigating this set of relationships, I hoped to provide some empirical support for the positions of Chris Argyris, Rensis Likert, and those who agree with them on matters of organizational theory. I hoped also to establish a basis for further, more sophisticated research into the problem of militancy in "professional" organizations.

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[1] In the 1968-69 school year, the NEA reported over 130 strikes by teachers, a record to that date. See "Teacher Strikes in 1968-69," Negotiations Research Digest, III, no. 3 (November 1969), p. 11.

Organizational Structure

There is ample reason to suspect that the structure of an organization, even a school, has some bearing on the occurrence of militancy among its members. The effects of organizational structure on the individuals who belong to the organization have received a great deal of attention in the literature and mention as factors leading to the outbreak of conflict between the organizational authority structure and the general membership of the organization. The work of Argyris[2] typifies the view of some that perhaps organizations and human beings weren't made for each other. Argyris is not voicing a minority opinion; much of the literature which deals with the relationships between organizational structure and human needs points accusing fingers at bureaucratization and the combination of size and complexity as major causes of the problems that organizations in general, and school organizations in particular, have with the personnel who work for them. James Worthy, although writing about business organizations rather than schools, puts the case typically and concisely:

> The results of our research suggest that over-complexity of organizational structure is one of the most important and fundamental causes of poor management-employe relationships in our modern economic system, and that until this problem is faced and corrected no substantial improvement in those relationships is likely to be possible.[3]

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[2]Chris Argyris, "The Individual and the Organization: Some Problems of Mutual Adjustment," Administrative Science Quarterly, II (June, 1957), 1-24.

[3]James C. Worthy, "Organizational Structure and Employe Morale," in Organizations: Structure and Behavior, ed. by Joseph A Litterer (New York, 1963), p. 269.

In listing the reasons that collective action has come to be an established pattern of dealing with problems in certain school systems, Lieberman and Moskow[4] note that the growth in size of school districts has necessitated systematic approaches to problems. In this sense, systematic means roughly the same thing as bureaucratic. At any rate, they contend, the result is that teachers lose their sense of personal participation in the process of formulating school policy.

Moeller[5] set out to verify this supposed inverse relation between the degree of bureaucratization of a school organization and the "sense of power" of the teachers in it. His findings do not substantiate the views of Lieberman and Moskow, but rather contradict them. In the sample of schools that he used, Moeller found teachers in the schools rated as more bureaucratic held a greater sense of power than did those in the schools rated as less bureaucratic. This finding is dated and, because of the size of its sample and the lack of replication, less than conclusive. However, aside from Moeller's work, there is a paucity of empirical evidence to support contentions either for or against a link between bureaucratization of school organizations and militancy among teachers. For all the evidence that exists, the relation might be the opposite, or non-existent.

In the more general literature on organizations, writers agree about the effects of organizational structure on the attitudes and

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[4]Myron Lieberman and Michael H. Moskow, Collective Negotiations for Teachers (Chicago, 1966), pp. 58-59.

[5]Gerald Moeller, "Bureaucracy and Teachers' Sense of Power," Administrator's Notebook, XI, 3 (1962).

performances of organizational personnel to the extent that their agreement constitute a norm. Hickson compares the concepts developed by a large number of organizational theorists and notes that the general trends of their commentaries converge on one facet of organizational structure. He points out that most writers place great stress on the importance of the quality of organizational structure that Burns and Stalker name "organic" or "organismic." Hickson points out that Argyris calls this same quality "self-actualizing," that Presthus terms it "unstructured," and that it has been given comparable names by more than a dozen other writers.[6] The basic point that Hickson[7] makes is that all of these terms focus on one characteristic, the degree of specificity prescribed in the roles of organization members. There is a general agreement among the writers Hickson cites that a low order of such specificity assists organizations in dealing with complex tasks in changing environments, conditions which most would agree are faced by schools.

Potential Militancy

Proceeding on the basis that organizational structure is related to militancy, one is still left with differences among individuals in their reactions to situations which they essentially perceive in the same way. Why?

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[6] D. J. Hickson, "A Convergence in Organization Theory," Administrative Science Quarterly, XI, 2 (1966), 224-237; Chris Argyris, Integrating the Individual and the Organization (New York, 1964); Robert Presthus, "Toward a Theory of Organizational Behavior," Educational Administration: Selected Readings, ed. by Walter G. Hack et al. (Boston, 1965), 296-309.

[7] Hickson, "Convergence," p. 225.

Boyan[8] attributes a portion of the responsibility for the increasing levels of conflict between teachers and school authorities to a growing aspiration to professional status among teachers. In turn, Boyan argues that part of the reason for the growing emphasis upon professionalism is that the proportion of men in the teaching community has been increasing in recent years. He claims that teachers, and particularly men teachers, are beginning to view their participation in the process of making educational decisions as a matter of professional right, rather than as a matter of privilege granted to them by patronizing school boards. Wildman[9] seconds this position, pointing out that teachers have long been expected to perform professional functions without holding professional authority. The inconsistency between the allocations of responsibility and those of authority is largely responsible for the frustration that results in militancy, according to Wildman's thinking. Corwin[10] attempts to establish the tie between professional role orientation and militant behavior by teachers. Interestingly, he concludes that persons with professional role orientations do tend to be militant in greater proportions than do those with bureaucratic role orientations, but that the converse of this

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[8]Norman J. Boyan, "The Emergent Role of the Teacher and the Authority Structure of the School," in Collective Negotiations and Educational Administration, ed. by Roy B. Allen and John Schmid (Fayetteville, 1966), 2-5.

[9]Wesley A. Wildman, "What Prompts Greater Teacher Militancy?" American School Boards Journal, CLIII, 3 (March, 1967), 27-28.

[10]Ronald Corwin, "Militant Professionalism, Initiative and Compliance in Public Education," Sociology of Education, XXXVIII (Summer, 1965), 310-331.

relation does not hold; those who are militant do not tend to be more professionally oriented than otherwise.

Corwin's findings led me to the belief that the tendency to be militant is not so closely related to the professional role orientation that the two should be considered synonymous. Rather, it seems to me likely that the individual's disposition towards militant kinds of behavior might itself constitute a variable worth investigating in relation to the occurrence of militancy in schools. Thus, greater proportions of professionally oriented teachers may become militant, not because of something inherently militant about the professional role orientation, but because the greater expansiveness of the professional role concept generates more frequent conflicts with concepts of the teacher's role held by school authorities.

It is necessary to separate the disposition to act militantly or non-militantly from the role orientation of the individual. By so doing, one treats as a key variable the individual's perceptions of how he would act in situations involving conflict with the system.

Taking this view, one would expect militant behavior by persons who are disposed to that kind of behavior in conflict situations. Their role orientations come into play because they affect the rates at which these persons encounter conflict situations. To illustrate this point, one would not be likely to encounter highly militant behavior on the part of a quiet spoken, mild-mannered teacher, no matter how professionally oriented he might be, because of his personal disposition to act in other ways. By contrast, one might expect that an aggressive teacher, however bureaucratically or non-professionally

oriented, will be likely to become quite militant whenever he believes his proper prerogatives are violated by others.

Definitions

Militancy

Militant behavior is defined as that behavior characterized by the use of combative tactics, individually or as a part of group action, in a struggle for power between teachers and school authorities. For example, a teacher who attends school board meetings with a group of teachers is moderately militant if the group is using its presence to put pressure on the board to act in certain ways. A greater degree of militancy is displayed by the teacher who is directly involved in the institution of formal sanctions against his school district by a teachers' organization. Yet a greater degree of militancy is shown by the teacher who resigns his position in protest over the actions or policies of his school authorities. Of course, the most widely publicized form of teacher militancy is the strike, but participation in a strike is just one type of act in a whole range of behaviors for which the term militancy is appropriate.

Structural Openness

Structural openness is defined as the composite of the teacher's perceptions of the vertical and lateral openness to, and quality of, communications, the degree of participation in organizational decision making by teachers, and the degree of influence that he can exert on the directions of organizational goals and methods. This definition

is taken from the characteristics that Likert[11] ascribed to the "System 4" organization. The scale used to differentiate on the structural openness dimension is derived from the instrument Likert used to distinguish among the four systems of management.

Initiative

The term initiative is taken from the work of Ronald Corwin.[12] The word is used to denote potential militancy, as indicated by the relative severity of the reactions that teachers indicate they would take in certain hypothetical situations. In these situations, administrators or school board members have clearly violated prerogatives which teachers commonly hold to be theirs. This narrow definition is a practical accomodation to Corwin's instrument. According to this definition, a teacher displays relatively high initiative if he states that he would refuse to comply with a school board directive restricting political activity by teachers. The opposite of initiative, compliance, is indicated if the teacher states that he would try to compromise in such a situation.

Hypotheses

In the discussion above, I have made the distinction between potential militancy (initiative) and the actual thing. The difference is at the focus of this study. To be militant, one must have the potential for it and have the conditions for translating potential into

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[11] Rensis Likert, The Human Organization (New York, 1967), pp. 4-10.

[12] Ronald Corwin, The Development of an Instrument for Examining Staff Conflicts in the Public Schools (Columbus, 1963), 198-200.

fact met. The contention behind this study is that perceived structure is a key condition to the translation of potential militancy (initiative) into actual militancy. Thus, one would expect a high order of militancy among those high in initiative who also perceive low structural openness in their schools. For teachers whose level of initiative is low, the likelihood of militancy will be low and relatively independent of structural openness. These expectations are summarized in Figure 1.

	Low Initiative	High Initiative
High Structural Openness	Low Militancy	Low to Moderate Militancy
Low Structural Openness	Low Militancy	High Militancy

Fig. 1--Relationships between Initiative, Structural Openness, and Militancy

The foregoing discussion leads to the statement of the following hypotheses:

1. a. Among persons with high initiative, there will be a direct, negative relationship between structural openness and militancy.

   b. Among persons with low initiative, there will be no relationship between structural openness and militancy.

2. a. Among those persons perceiving high structural openness in their schools, there will be no relationship between militancy and initiative.

   b. Among those persons perceiving low structural openness in their schools, there will be a direct, positive relationship between initiative and militancy.

3. a. Men will have higher initiative than will women.

   b. Men will perceive lower structural openness than will women.

   c. Greater proportions of men than of women will be highly militant and greater proportions of women than of men will be relatively non-militant.

4. a. Older teachers will report lower initiative than younger teachers.

   b. Older teachers will report greater structural openness than will younger teachers.

   c. Older teachers will be less militant than younger teachers.

5. a. Teachers in smaller schools will perceive greater structural openness than will teachers in larger schools.

   b. There will be a positive relationship between militancy and school size.

METHODOLOGY AND SAMPLING

This study was carried out as a part of a project studying the process of instituting change in school organizations. Being a part of a larger project both enhanced and limited the study. The enhancement involved the size of sample permitted and the resources available for data collection and analysis. Severe limitations were imposed on the types and sizes of instruments used.

The design of the research is that of a simple, one-shot, descriptive study. The instrument by which data was collected was a four part questionnaire, requesting information on militancy, initiative, structural openness, and demography. This was handed to subjects at the conclusion of a brief interview dealing with aspects of, and participants in, a set of organizational and curricular changes taking place in the school or school district. The questionnaire was not anonymous, so that responses could be collated with interview data; but respondents were asked to return them via direct mail to the project. Confidentiality was assured. The high rate of original returns and a follow-up on unreturned questionnaires resulted in 86% of the sample returning usable questionnaires.

Sample

The sample consisted of a random choice of half of the staff of each of twelve suburban high schools in the San Francisco Penninsula area. The schools represented four relatively large school districts.

The selection of schools itself was not random. They were selected for accessibility, willingness to tolerate study, and proximity to the research center, Stanford University. This imposed a limit on the generalizability of the study, but the resources simply were not available to gather data from schools selected on a systematically representative basis.

From the selected schools, 589 teachers, counselors, administrators, and department heads were selected at random for participation. Of these, 522 returned questionnaires. Omission of blocks of items on the questionnaire reduced the usable sample to 507 for the basic hypotheses, with more available for some tests of corollary hypotheses.

Of the 522 persons who returned usable questionnaires, 322 were men and 200 were women. The sample contained 386 teachers, seventy-one department heads, twenty-nine counselors, twenty-four administrators, and twelve persons whose positions did not fit any of the foregoing categories. There were 214 persons holding baccalaureate degrees only, 299 holders of master's degrees, and nine holders of doctorates.

Instrumentation

Militancy

The militancy scale consists of a single request. This asks the respondent to check which of a list of twenty-one activities he has engaged in during the previous calendar year and asks him to specify the dates of such activity. The intent of the latter was to discourage over-enthusiastic reporting.

The behaviors on this list were grouped into three categories: the highly militant, the moderately militant, and the relatively non-

militant. Those in the category of the highly militant included resigning in protest over school policy, participating in a strike or "professional holiday," and requesting a formal investigation of the school district's practices by a professional organization. Moderately militant activities included reporting sick in groups, taking grievances to the principal, and "working to the rule." Relatively non-militant actions included developing or presenting teacher's organization proposals and "none of the above." The questionnaires on which "other action taken to influence administration or school board" was checked were read individually, and the responses were placed into one of the three categories.

The categorization of individual respondents was accomplished by labelling as highly militant those who checked one or more of the highly militant actions (items one through ten of the militancy questionnaire), labelling as moderately militant those who checked one or more of the moderately militant actions (items eleven through eighteen), and labelling as relatively non-militant those who checked only from items nineteen, twenty, or twenty-two. These categorizations were treated as mutually exclusive and collectively exhaustive; a person who checked both highly militant and relatively non-militant activities was categorized as highly militant.

Structural Openness

The scale used to determine the degree of perceived structural openness is composed of questions adapted from the scale developed

by Rensis Likert for use in rating industrial management.[13] The modifications of these questions were made to increase the clarity of the questions within the setting in which they were to be used and to eliminate the need for teachers to read a series of lengthy responses to each item before answering the questions. The modifications were made without altering the essential conceptual content of the questions. In most cases, these changes consisted merely of substituting the words "administrator" and "teacher" for "superior" and "subordinate" respectively, a change which made the terminology of the questions agree with that commonly used in the schools.

The structural openness scale consists of twelve items from Likert's scale, modified as indicated above. Each of these items asks the respondent to state which of four choices best describes his school organization with respect to an important facet of the operation of the organization. The following is an example of this type of question:

> To what extent do administrators willingly share information with teachers?
> a. Provide a minimum of information
> b. Give the teachers only the information they think teachers need
> c. Give information needed and answer most questions
> d. Seek to give teachers all relevant information and all information they want

Other questions in this set ask the individual about the organization's freedom of vertical and lateral communications, the degree and quality of interaction among teachers, the influence teachers have on methods and

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[13] Rensis Likert, The Human Organization (New York, 1967), pp. 197-211. Used with the permission of McGraw-Hill Book Company.

goals, the degree of teacher involvement in decision making, and the levels at which decisions are made.

The responses to each of the questions in this scale are weighted from one to four, with higher scores indicating greater perceived openness and zero indicating missing data. A randomly selected set of the questions had the order of responses reversed to mask a preferred direction of response in the questions as a set; the inclusion of other, unrelated, questions in the same section should have further masked any such bias. The order of weighting was righted computationally in the course of deriving scale scores. These scores were computed by adding the twelve item scores and dividing by the number of items answered. Where no items were answered, the computational method produced a score of zero, noted on the data set as a missing item of information. The results of these manipulations is the mean of the twelve (or fewer) structural openness responses.

Initiative

The questions used to determine "initiative" were taken from the scale developed by Ronald Corwin in connection with his work on staff conflicts in public schools.[14] In each of these questions, the respondent is asked to imagine himself as the teacher in an incident in which the teacher is required to choose between behavioral norms imposed by someone representing school authorities (an administrator

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[14]Ronald Corwin, The Development of an Instrument for Examining Staff Conflicts in the Public School (Columbus, Ohio, 1963), pp. 192-202; see also Ronald Corwin, Staff Conflicts in the Public Schools (Columbus, Ohio, 1966), pp. 486-492.

or school board member) and his own norms of behavior. As the terms are used in connection with this type of situation, showing initiative means choosing one's own norms of behavior; and showing compliance means choosing the norms advocated by school authorities.

The following is one of the eleven initiative scale items:

> A chemistry teacher took an active stand in favor of water fluoridation in a community that was divided on the issue. The superintendent requested him to avoid becoming further involved in the issue. He refused.[15]

Concerning this situation, the respondent is asked to indicate which of six actions he would be most likely to take if he were the teacher in the incident. The six actions range from complying with the request to quitting.

In Corwin's use of this scale, the teachers were also asked to anticipate the severity of sanction that might be brought against them in each instance. The combinations of the two responses were used to build a six class typology of initiative-compliance behavior. Since this typology provided for more subdivision of the teacher sample than could be used in this study, it was not fully employed. Instead, the six basic actions were rated from one to six in order of severity and used to develop a simple scale similar in construction to that for structural openness. The sum of the scores on the eleven items was divided by the number of items answered (if that number was greater than or equal to one; by one if no items were answered).

The result of the above operations is a scale with a range from one to six, with higher scores indicating higher initiative and with

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[15]Corwin, Staff Conflicts, p. 490.

a score of zero representing a missing set of data. As with the scale for structural openness, the process of division introduces an artificial appearance of continuity to the data. The effect of this however, should be slight. The basic tests of hypotheses do not depend on such false continuity.

Analyses of Data

For the tests of the basic hypotheses (1 and 2), the initiative and structural openness scales were dichotomized at the means. The three scales divided the sample into a two by two by three cell array. Each level of the initiative scale was tested for association between structural openness and militancy using the chi-square statistic. Similarly, each level of structural openness was tested for association between initiative and militancy. The strength of significant associations were assessed by means of the Cramér ϕ' statistic.

The tests of hypothesized relations between age or sex and initiative or structural openness used one-way fixed effects analysis of variance procedures.[16] Post-hoc comparisons were made where null hypotheses were rejected. Tests for relations between militancy and age or sex employed the chi-square statistic.

The test for the effect of school size on structural openness used the Student's t statistic in a procedure which compensates for differences in group variances.[17] The test for relationship between

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[16]The computations for these tests were performed on computers, using program BMD 01V. See W. J. Dixon, ed., BMD Biomedical Computer Programs (Berkeley, 1968), pp. 486-494.

[17]W. J. Dixon and F. J. Massey, Jr., Introduction to Statistical Analysis (New York, 1957), pp. 123-124.

militancy and school size used the chi-square technique. In both of these tests, school size was dichotomized at a naturally occurring gap. Six schools had less than 1900 average daily attendance (ADA), and six schools had ADA of over 2000. The level of significance used for all tests of hypotheses was 0.05.

RESULTS

General inferences from the tests of hypotheses in this study depend upon the validity of the following assumptions:

1. Persons in the sample responded honestly to the questions they were asked.

2. Those persons who did not respond to the questionnaire did not for a random variety of reasons.

3. Initiative is an indicator of potential behavior stable over at least the period covered by the study.

4. Structural openness is stable over at least the period covered by the study.

5. The sample used is representative of the general population of secondary school professional staff members.

Under these assumptions, the data gathered in this study support the notion that initiative, structural openness, and militancy are interrelated. Table 1 displays the arrangement of data used for the tests of Hypotheses 1 and 2.

TABLE 1

DISTRIBUTION OF MILITANCY,
STRUCTURAL OPENNESS, AND INITIATIVE

Militancy	Low Openness		High Openness		Total
	Low Initiative	High Initiative	Low Initiative	High Initiative	
High	A 29	B 53	C 17	D 11	110
Moderate	41	54	24	24	143
Low	58	47	97	52	254
Total	128	154	138	87	507

Hypothesis 1a was confirmed. There was a negative relationship between structural openness and militancy among persons in the high initiative category ($\chi^2_{(2)} = 22.45$, using columns B and D). The strength of this relation was confirmed by the value of the Cramér ϕ' (0.31).[18]

Hypothesis 1b was rejected. There was nearly as strong a negative relationship between structural openness and militancy among those in the low initiative category as among those in the high category. The value of χ^2 for the test on columns A and C was 17.19, with 2 degrees of freedom. The value of Cramér's ϕ' was 0.25.

Both segments of Hypothesis 2 were supported. Hypothesis 2a was not rejected, and Hypothesis 2b was confirmed. There was no

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[18] For a discussion of this statistic as a supplement to the chi-square test, see William L. Hays, Statistics for Psychologists (New York, 1963), pp. 604-610.

apparent relationship between initiative and militancy among persons perceiving high structural openness ($\chi^2_{(2)} = 3.46$, using columns C and D). There was a positive relationship between initiative and militancy among persons perceiving low structural openness ($\chi^2_{(2)} = 7.58$, using columns A and B). The value of Cramér's ϕ' for this relation is 0.16.

The third hypothesis was not supported by these data in any of its parts. No significant differences were found between men and women on structural openness and militancy (Hypotheses 3b and 3c). Only one sexually based difference did turn up on the initiative scale; though the difference was not between means, but between variances. Women showed significantly less variation on this scale than did men ($F_{(319, 197)} = 1.42$). Tabulations used in the tests of these hypotheses are shown in Tables 2, 3, and 4.

TABLE 2

ANALYSIS OF VARIANCE TEST FOR DIFFERENCES IN INITIATIVE BETWEEN MEN AND WOMEN

Source of Variance	Sums of Squares	Degrees of Freedom	Mean Square	F Ratio
Between Groups	0.6530	1	0.6530	1.3376
Within Groups	250.9289	514	0.4882	n. s.
Total	251.5819	515		

TABLE 3

ANALYSIS OF VARIANCE TEST FOR DIFFERENCES IN PERCEIVED STRUCTURAL OPENNESS BETWEEN MEN AND WOMEN

Source of Variance	Sums of Squares	Degrees of Freedom	Mean Square	F Ratio
Between Groups	0.9116	1	0.9116	3.6613
Within Groups	128.7203	517	0.2490	n. s.
Total	129.6319	518		

TABLE 4

DISTRIBUTION OF MILITANCY AND SEX

Sex	Militancy			Total
	Relatively Non-Militant	Moderately Militant	Highly Militant	
Men	153 (48.6)*	85 (27.0)	77 (24.4)	315
Women	104 (53.1)	58 (29.6)	34 (17.3)	196
Total	257	148	111	511

$\chi^2_{(2)} = 3.580$ * Row percentage

The hypotheses of differences among age groups (4a and 4b) were supported by the data used here. Differences in initiative were of a significant order and found, by post hoc comparison, in the predicted

direction (higher among the young).[19] Differences among age groups on structural openness were also significant, but post hoc comparisons fell short of the desired level for concluding higher perceived openness among older persons.[20] The tabulations for these hypotheses are shown in Tables 5a, 5b, 6a, and 6b.

TABLE 5a

ANALYSIS OF VARIANCE TEST FOR DIFFERENCES IN INITIATIVE AMONG FIVE AGE GROUPS

Source of Variance	Sums of Squares	Degrees of Freedom	Mean Square	F Ratio
Between Groups	7.1589	4	1.7897	3.7533*
Within Groups	243.6615	511	0.4768	
Total	250.8204	515		

[19]The Scheffé S^2 statistic for post hoc comparison of group means was 13.0 for a comparison of the two eldest groups against the two youngest. $S^2_{0.95\ (4,69)} = 10.0$. See George W. Snedecor and William G. Cochran, Statistical Methods (Ames, Iowa, 1967), p. 324 for explanation of this procedure. The procedure corrects for non-homoscedasticity in the data.

[20]$S^2_{(4,48)} = 9.76$.

TABLE 5b

MEANS AND VARIANCES OF INITIATIVE SCORES
FOR FIVE AGE GROUPS

	Age Group				
	< 26	26 - 35	36 - 45	46 - 55	> 55
N	57	178	169	90	22
Mean	3.445	3.215	3.130	3.058	2.946
Variance	0.345	0.418	0.528	0.598	0.394

TABLE 6a

ANALYSIS OF VARIANCE TEST FOR DIFFERENCES
IN PERCEIVED STRUCTURAL OPENNESS
AMONG FIVE AGE GROUPS

Source of Variance	Sums of Squares	Degrees of Freedom	Mean Square	F Ratio
Between Groups	3.7803	4	0.9451	3.8613*
Within Groups	125.8052	514	0.2448	
Total	129.5856	515		

TABLE 6b

MEANS AND VARIANCES OF PERCEIVED STRUCTURAL OPENNESS SCORES FOR FIVE AGE GROUPS

	Age Group				
	< 26	26 - 35	36 - 45	46 - 55	> 55
N	56	177	172	92	22
Mean	2.674	2.638	2.700	2.795	3.020
Variance	0.224	0.245	0.221	0.240	0.372

The data do not support the hypothesis of a relationship between age and militancy. The crosstabulation of militancy and age categories is shown in Table 7.

TABLE 7

DISTRIBUTION OF AGE AND MILITANCY

Age Group	Militancy			Total
	Relatively Non-Militant	Moderately Militant	Highly Militant	
Under 26	31 (54.4)*	18 (31.6)	8 (14.0)	57
26 - 35	79 (45.4)	51 (29.6)	44 (25.3)	174
36 - 45	87 (52.1)	44 (26.3)	36 (21.6)	167
46 - 55	50 (54.9)	23 (25.3)	18 (19.8)	91
Over 55	11 (50.0)	7 (31.8)	4 (18.2)	22
Total	258	144	110	512

$\chi^2_{(8)} = 5.267$ * Row percentage

The final hypothesis dealt with expected relationships between school size and structural openness or militancy. There was a strong relationship between school size and structural openness in the opposite direction of that predicted; larger schools were perceived as more open. No relation appeared between school size and militancy. The results of these tests of hypotheses are shown in Tables 8 and 9.

TABLE 8

STUDENT T TEST FOR DIFFERENCES IN PERCEIVED STRUCTURAL OPENNESS BASED ON SCHOOL SIZE

Group	Mean	N	Variance	Computed Value of "t"
Over 2000 ADA	2.7530	301	0.221	- 2.50*
Under 1900 ADA	2.6402	219	0.284	with 440 d.f.

TABLE 9

DISTRIBUTION OF MILITANCY BY SIZE OF SCHOOL

Group	Militancy			Total
	Relatively Non-Militant	Moderately Militant	Highly Militant	
Over 2000 ADA	153	84	59	296
Under 1900 ADA	105	59	52	216
Total	258	143	111	512

χ^2 (2) = 1.51

DISCUSSION

The results of this study lead to simple interpretations. Great subtlety is not justified with such crude methods.

The substance of theory behind Hypotheses 1 and 2 is borne out. There are relationships among initiative (potential militancy), perceived structural openness, and the occurrence of militancy by school personnel. The strength of the relation between structural openness was a surprise, but not one inconsistent with either theory or the other results. It does, however, considerably strengthen my respect for Argyris' argument concerning the relationship between organizational structure and individual behavior.[21]

One ought not to conclude from this that perceptions of low openness cause militancy. The study was not able to distinguish cause from effect. One should also keep in mind that factors other than initiative and structural openness affect militancy, as should be obvious from the fact that militancy occurs among teachers reporting low initiative and high structural openness. At this point, a familiar incantation, "Further research into this phenomenon is necessary," is to be heard echoing in the background. Ideally, such further research should include further conceptual development of

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[21]Chris Arygris, "The Individual and the Crganization: Some Problems of Mutual Adjustment," Administrative Science Quarterly, II (June, 1957), 1-24.

initiative, openness, and militancy, as well as development of their scales. It should also be designed to permit inferences regarding causality.

The failure to find support for hypothesized sexually based differences on each of three principal variables was an intriguing surprise. Boyan and others have been so insistent about the importance of sex in relation to professional role assumption by teachers that I almost adopted the hypothesis concerning sex and militancy without further thought. The failure to confirm this hypothesis might be rooted in the methodology,[22] but the problem generated is insistent and not satisfactorily dismissed by handwaving about inadequate samples or techniques. The one definite difference between the sexes was the lower variance among women on the initiative scale. This may be related to sexual role differences.

The different roles to which women are socialized may merely reduce the range of behaviors exhibited or considered, rather than limit those behaviors to "passive" modes, as suggested by Brown's[23] interpretation of Margaret Mead. Also, since many of the behaviors used in the militancy scale are group phenomena more than individual acts, the participation of women in these may be as much a reflection of their socialization into a group that employs militant tactics as it is an

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[22] A game I played with a subsample of the data and two-way analysis of variance indicated differences by age and sex in initiative scores, but by age only in structural openness scores. This subsample was randomly selected to produce equal sized age/sex cells. The inferences to which it leads are provacative, but not conclusive.

[23] Roger Brown, Social Psychology (New York, 1965), pp. 162-172.

indication of their personal espousal of the tactics involved. Since the militancy categories do not distinguish between group acts and individual acts, this question remains unanswered. It should be considered in future endeavors.

The relationships between age and initiative came out generally as expected, even though militancy was not clearly influenced by age. A close inspection of some of the data reveals an interesting pattern to these relationships. These patterns seem to be those of quadratic relationships rather than linear.[24] The data are crude, but plots of structural openness and percentage of teachers involved in militancy by age groups show such patterns quite clearly. The plots are shown in Figure 2.

These graphs seem to indicate that the low point of perceived influence on the school organization and the high point of militancy coincide with the 26-35 year old group. One wonders if there is a period of experience required to perceive fully the problems in an organization and a yet longer period to be mature or tired enough to make allowances for them. The data surely do not suggest anything so simple as a "generation gap," with the young and inexperienced in rebellion against the "establishment."

Finally, the relationships of structural openness and militancy to school size turned out quite differently from my expectations. Not finding a relation between school size and militancy was not a

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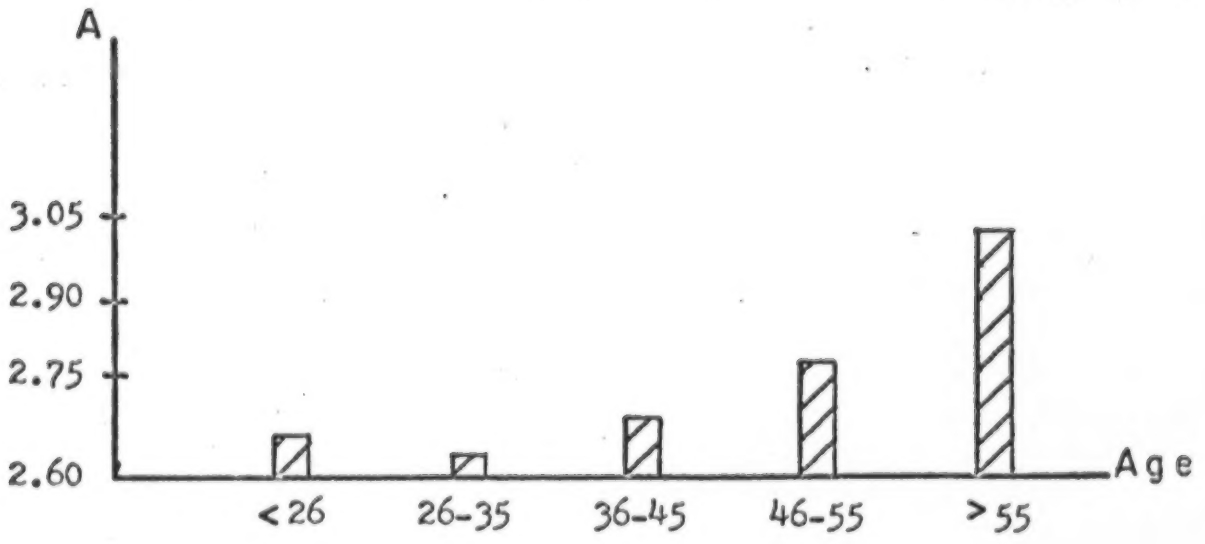
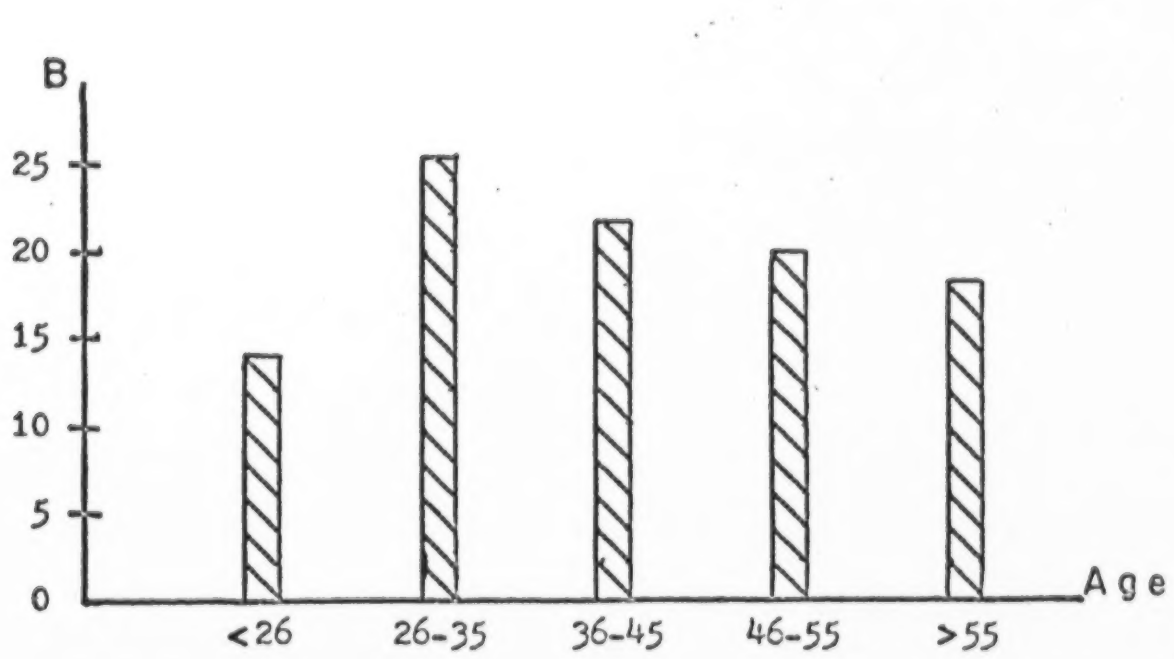
[24]This view is supported by my two-way ANOVA on a subset of the data. The major component of the age groups sum of squares was quadratic in nature. Linear and cubic components were very small by comparison.





A. Structural Openness Mean

B. Percentage of Group in Highly Militant Category

Fig. 2--Comparison of Militancy Rates and Structural Openness Means by Age Group

shock, but finding the smaller schools less open was quite unexpected. The possible reasons for this are several.

There is a distinct possibility of sampling bias, as the schools were not randomly chosen. However, beyond this possibility there are probable rational explanations in the structures of the organizations themselves.

There is probably a tie between school size and bureaucratization, as I had assumed. However, bureaucratization per se is not a source of frustration; it is over-bureaucratization that produces frustration and powerlessness. What we are seeing in the smaller schools--with their high variance in openness--are the effects of under-bureaucratization, authoritarian control centered in the principal, or both. Under-bureaucratization--with its loose, ill-defined structure--probably frustrates individuals in just about the same way "tar-baby" frustrated Br'er Rabbit, absorbing all efforts to move it with no visible effect, except the outrage of the would-be change agent.

It is also possible that near the size dividing these sets of schools, a shift in organizational pattern is made. Smaller schools may well use Likert's "man-to-man" organization while larger schools employ "overlapping group" patterns.[25] Another possibility is that the same patterns are used in both, but larger schools employ at least one more functional level, i.e., department chairmen, than do smaller schools. This would tend to produce a regression effect in perceptions of structural openness, avoiding extremes of either openness or closure in

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[25] Rensis Likert, The Human Organization (New York, 1967), pp. 49-51.

the overall rating of the school. Hoagland's finding of significant variations in ratings on the Organizational Climate Description Questionnaire by academic department lends support to this notion.[26] In larger schools, the department may be the functional unit in shaping the individual's view of the school. In small schools it is certainly the principal.

In conclusion, this study has demonstrated ties among the teacher's perception of his ability to influence the school (structural openness), the teacher's potential for militancy (initiative), and his actual militancy. This was the main purpose of the study; its accomplishment should be considered as only a start. The findings justify more detailed and sophisticated methods of study in this field; they do not justify grandiose pronouncements about causes and effects. These findings do bring into question commonly held expectations concerning the effects of sexual roles and organizational size on individuals' behavior. Both of these areas need careful thinking and study. It would be appropriate to abandon the preconceptions, "Men are greater; women are lesser," and "Bigger is worser," before starting.

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[26] Robert M. Hoagland, "Teacher Personality, Organizational Climate, and Teacher Job Satisfaction" (Unpublished Ed.D. dissertation, Stanford University, 1968).

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